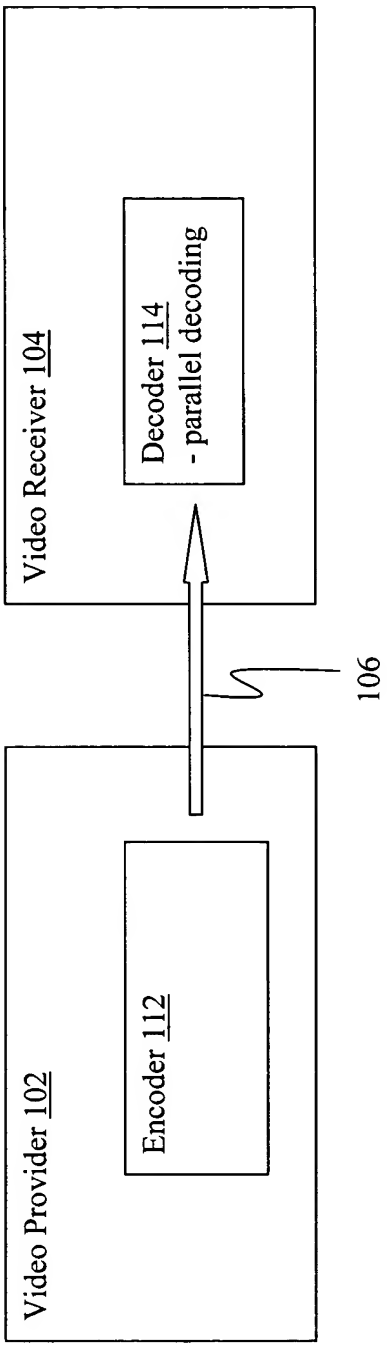
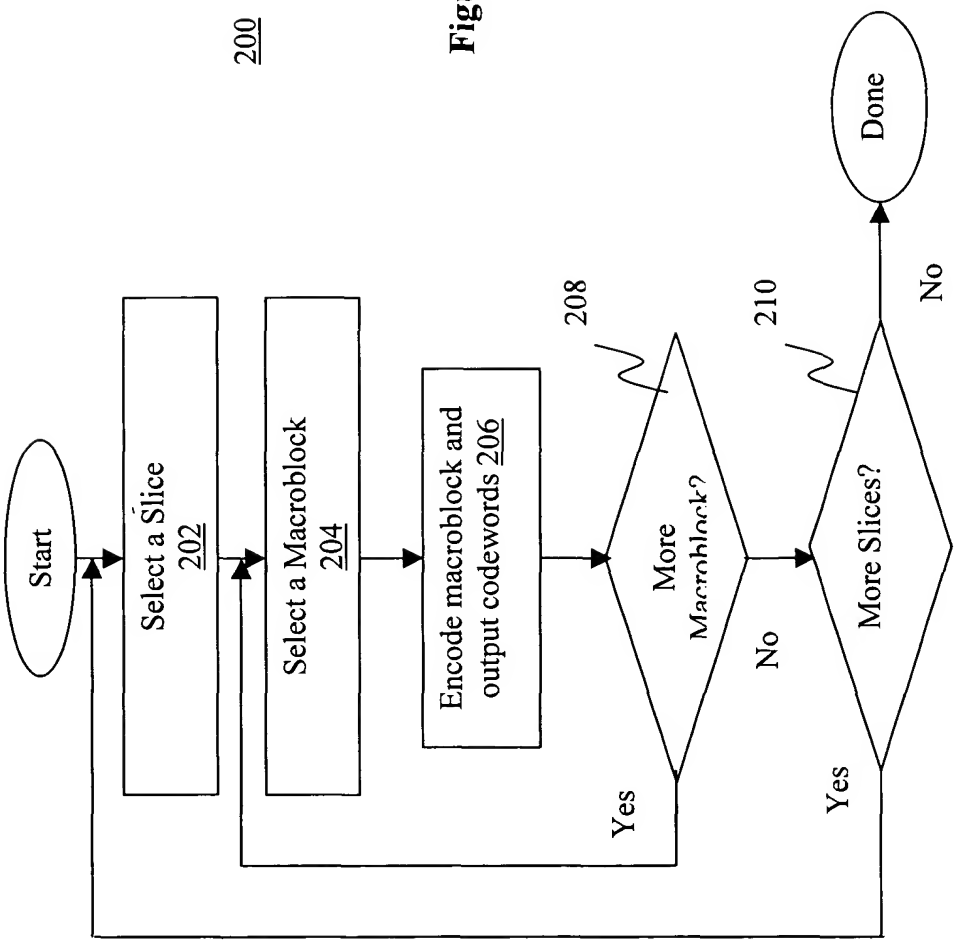
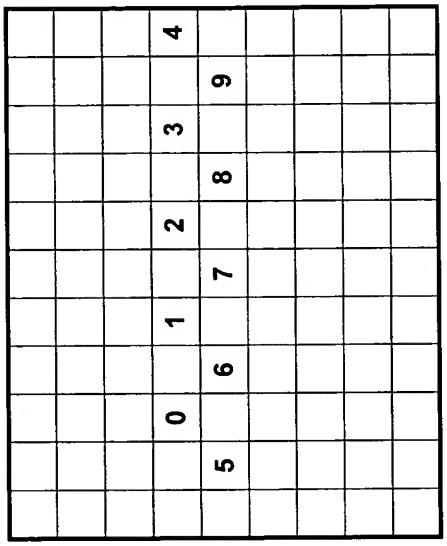

Video Receiver 104
Decoder 114
- parallel decoding
106
Video Provider 102
Encoder 112

Figure 1

Figure 2


200
Start
Select a Slice 202
Select a Macroblock 204
Encode macroblock and output codewords 206
208
More Macroblock?
Yes
No
210
More Slices?
Yes
No
Done



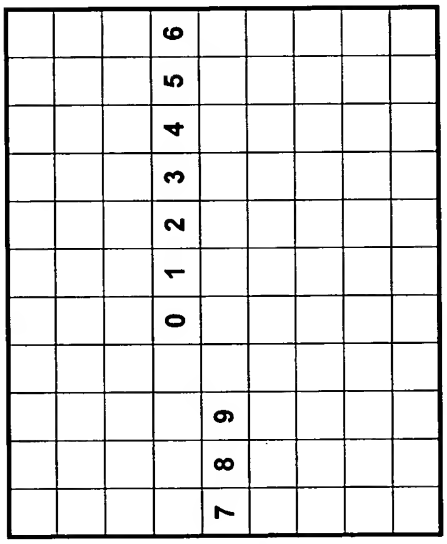


Figure 3

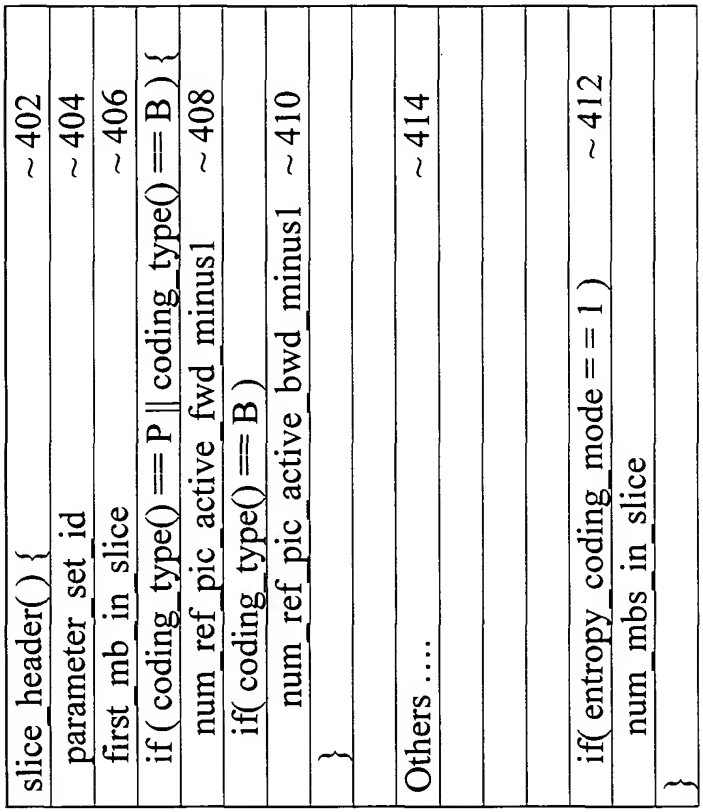

slice_header( ) {
~ 402
parameter_set_id
~ 404
first_mb_in_slice
~ 406
if (coding_type() == P || coding_type() == B) {
num_ref_pic_active_fwd_minus1
~ 408
if(coding_type() == B)
num_ref_pic_active_bwd_minus1
~ 410
}
Others ....
~ 414
if(entropy_coding_mode == = 1)
~ 412
num_mbs_in_slice
}

Figure 4

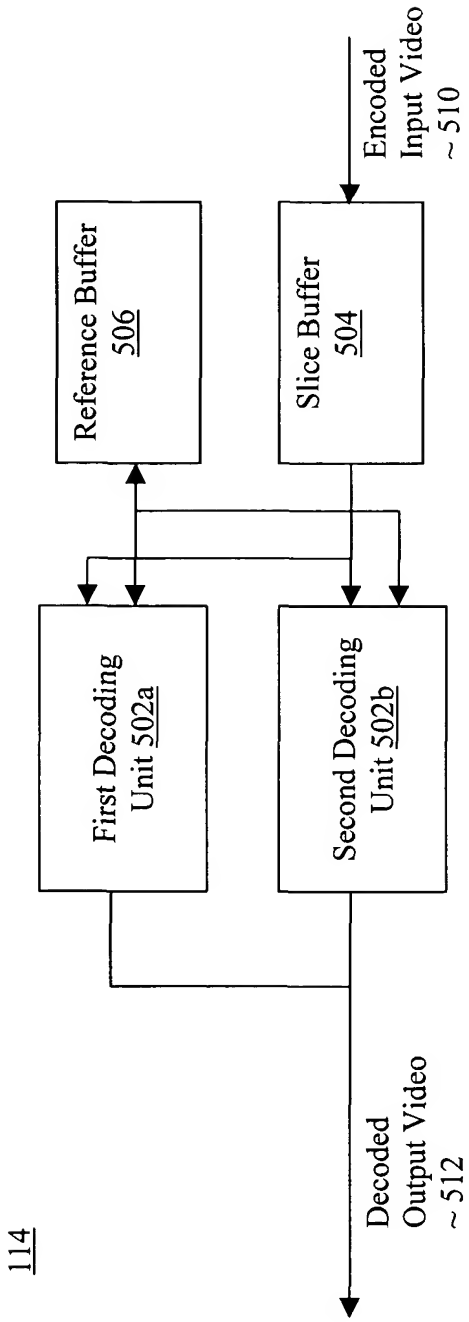

Encoded Input Video ~ 510
Reference Buffer 506
Slice Buffer 504
First Decoding Unit 502a
Second Decoding Unit 502b
Decoded Output Video ~ 512
114

Figure 5

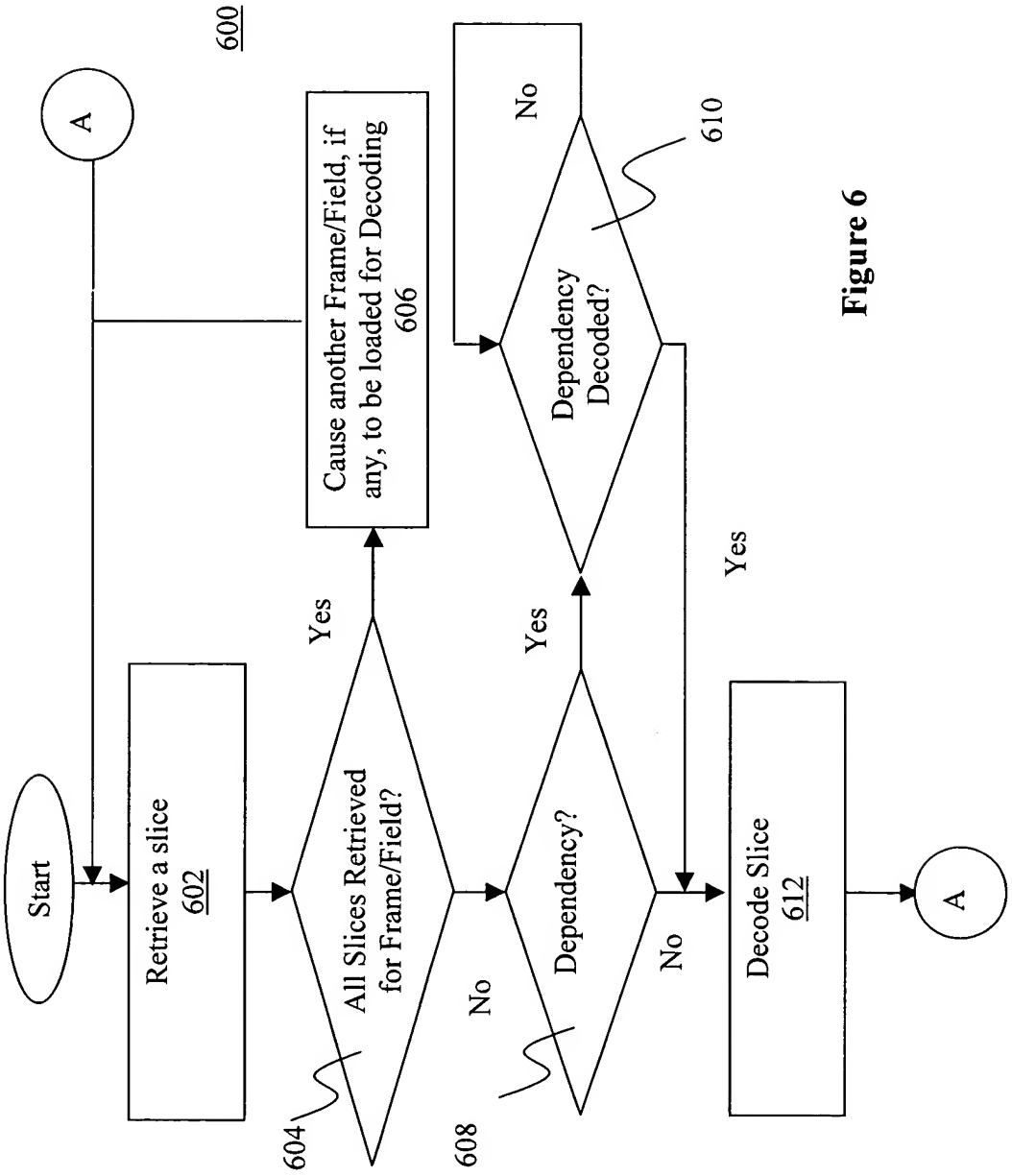

600
A
Start
Retrieve a slice
602
All Slices Retrieved for Frame/Field?
604
Yes
Cause another Frame/Field, if any, to be loaded for Decoding
606
No
Dependency?
608
Yes
No
Dependency Decoded?
610
Yes
No
Decode Slice
612
A

Figure 6

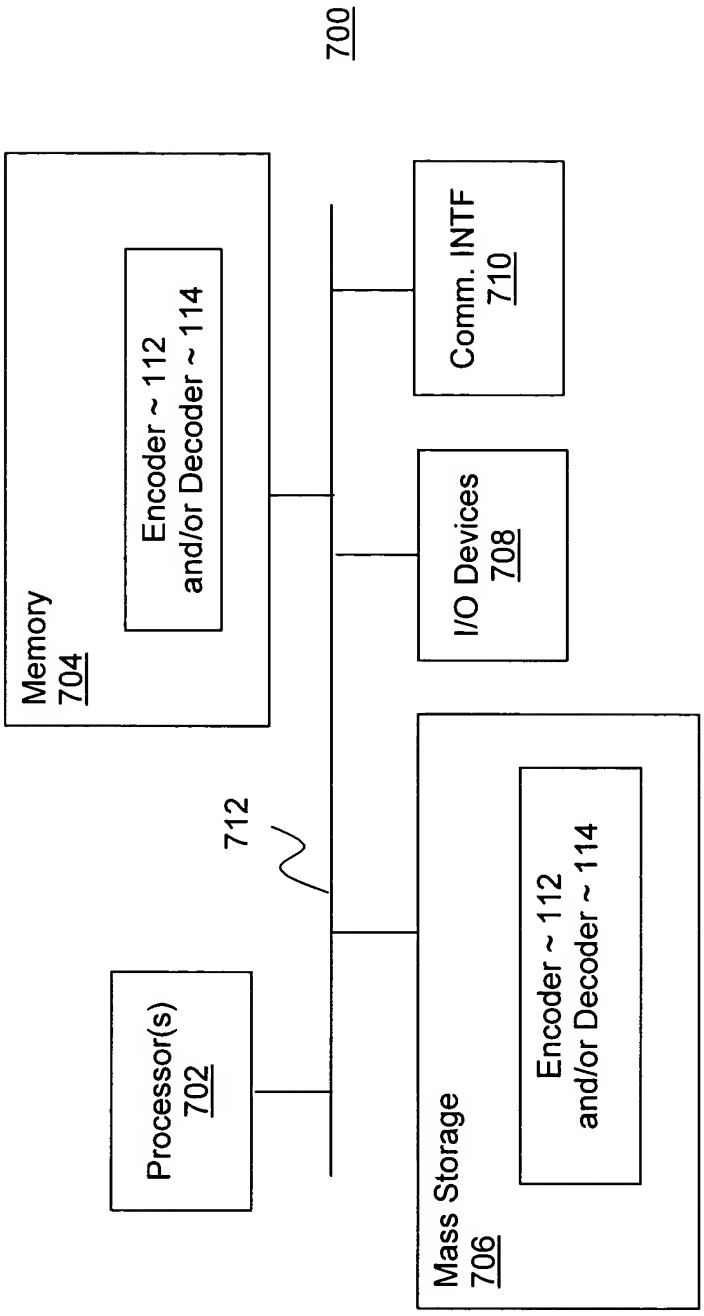

700
Memory
704
Encoder ~ 112
and/or Decoder ~ 114
Comm. INTF
710
I/O Devices
708
712
Processor(s)
702
Mass Storage
706
Encoder ~ 112
and/or Decoder ~ 114

Figure 7a

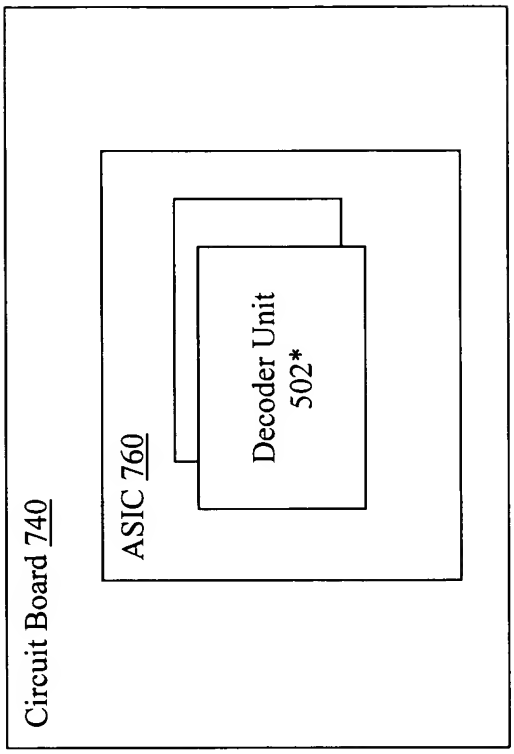


Figure 7c

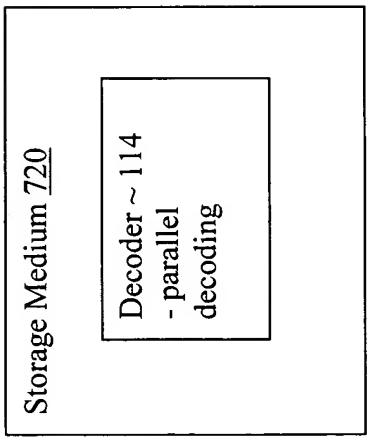


Figure 7b